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Installing PetWin+ 3 under Windows 7™

1. **Installing PetWin when BioWin is already installed**

   PetWin+ 3 will be installed in a separate directory from BioWin. **Note** that this upgrade will not affect BioWin versions which are separate applications. This means that users can run their copies of BioWin in parallel with PetWin+.

2. **Installation**

   Note #1 : Do **NOT** plug the Hardlock (Aladdin™) key into your computer until the installation is complete.

   Note #2 : You must have Administrator privileges to install the software.

   Installation from CD:

   - Insert the CD into the CD drive. Installation should start automatically.
   - If installation does not begin after several seconds:
     - Open a command prompt (click START button, type “command prompt” into the search field and click on “command prompt” in the selection window)
     - Type **D:\PW31SETUP.exe** (if your CD drive is another letter, replace D: with that letter). Click **OK** to start installation
     - Follow the instructions on the screen.

   Installation from downloaded file:

   - Go to the download location
   - Double-click on **PW31SETUP.exe**
   - Follow the instructions on the screen.

3. **Hardlock**

   After installation, and every time you want to run PetWin+, you must plug the Hardlock (Aladdin™) key into your PC (see picture below). **Hardlock key for PetWin+ :**

   The Hardlock USB is equipped with an LED which shows the status of the protection module. If you plug the Hardlock key into the USB port the LED does not light up, or if it flashes see the section “Hardlock USB key status information” in Appendix 1.

4. **Lease Activation Code**

   When you first run PetWin+ after installing, you will be prompted to enter a **Lease Activation Code**. This is located on a sticker on the back of the CD case. Type the code in, and press the **Apply Lease Code** button (**note that the code is NOT case sensitive**).
   Note: A common error is pressing the OK button instead of the Apply Lease Code button.

5. **Help (F1)**

   PetWin+ employs the latest in Help delivery technology, HTML help. This launches with a look and feel consistent with Microsoft Office™ products. For tips on using this effectively, look in the Help (press the F1 button) under the **"Getting Help in PetWin+"** chapter.

6. **Manual**

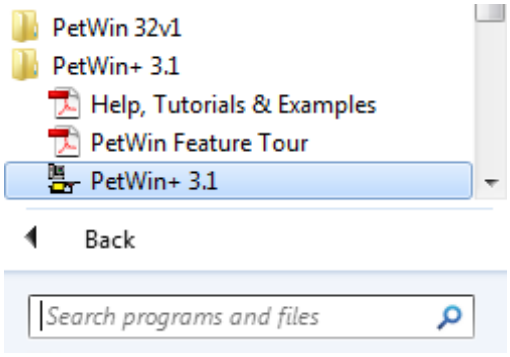
   PetWin+ does not ship with a printed manual. However, if you want to print the manual it has been shipped as an **Adobe™ PDF**. This document can be found on your PC in the **MISC** subdirectory of your PetWin+ installation directory (the standard path is **C:\PROGRAM FILES\ENVIROSIM\PETWIN+ 3.1\MISC** but depends on where you installed).

7. **Getting started**

   A good starting point is to print out the Tutorials chapter, and use this to get familiar with PetWin+. It's all in the Help, but having a hardcopy may be easier for the initial steps. After you install, there is a document called **Help, Tutorials & Examples.PDF** in the **MISC** subdirectory of the **PETWIN+ 3** directory. Alternatively, look on the CD in the **MANUAL** directory.

Running PetWin+ 3

To run PetWin+, click the **PetWin+** shortcut in the Start menu.



Appendix 1 – Hardlock information

General

The Aladdin Hardlock End User's Manual is in the document "hlendusersmanual_en.pdf" which is located in the **MANUAL** directory on the installation CD-ROM. The document contains detailed information about the Hardlock module, installations procedures and troubleshooting information. If you have purchased a server version of the software the document also describes the HL-Server and utility software.

Hardlock USB key status information

Hardlock USB is equipped with an LED display which shows the status of the protection module.

LED display	**Status**
LED does not light	The module is not recognized. Possible reasons: No driver, no USB support, module not functioning.
LED flashes at approx. 2 Hz	The module is recognized, but not initialized correctly. Possible reasons: Memory defective, module not encoded as a Hardlock module, module not functioning.
LED lights up	The module is recognized and initialized correctly.

If your USB key LED is steadily lit then the hardware should be functioning correctly and it is likely that your problem is not related to the installation of your key.

PetWin+ Hardlock key messages

PetWin+ error message	**Possible reasons**
Error : Unable to find Key OR All network licenses in use	1. The key is not plugged in or could not be found. 2. The key driver software is not properly installed. 3. If you have a server version of the software, then either the Hardlock server cannot be found or all the licenses are in use.
Error : Network error	1. If you do not have the server version then key cannot be found. 2. If you have a server version of the software, then an error in network operation (remote) was detected. This may occur, for example, if no protocol (such as IPX or NetBios) is loaded in the local client system.
Error : Accessing required driver	A required driver cannot be opened. The problem is usually that the driver is not installed.
Error : Too many users	The maximum number of users has been reached.
Error : Invalid environment settings	The specified environment variable for the API search sequence contains only incorrect entries.
Error : Version mismatch - HLVDD.DLL,	During communication, the system determined that the

HARDLOCK.VXD or HARDLOCK.SYS	HL-Server or an installed Hardlock driver is not compatible with the API version being used.

PetWin+ Lease Messages	**Possible Reasons**
LEASE EXPIRED	Your lease period has come to an end – contact EnviroSim for a lease renewal.
Your PetWin+ lease will expire in X days. Contact EnviroSim to renew your lease now.	Your lease will expire in the specified number of days.
Your PetWin+ lease was successfully updated	The lease code that you entered was accepted by PetWin+ and your lease date has been updated.
Your PetWin+ lease was successfully updated - An updated version is available.	The lease code that you entered was accepted by PetWin+ and your lease date has been updated. A minor update of the PetWin+ software is available.
Code appears to be mistyped - please check	The code that you entered is incorrect (for the key that you are using), or has been mistyped.
Program file appears corrupted	The PetWin+ executable file appears to be corrupt – please contact EnviroSim.
Purchased version PetWin+ - Code entered for older version	The activation code entered is only valid for the version of PetWin+ purchased. Please contact Envirosim.

Hardlock key search information

If your system has difficulties in finding the Hardlock key there are a number of environment variables that can be used to address these difficulties. The environment variables allow you to specifically use the port on which the key is installed, change the network search options and control retries and timeouts. The section **Setting Environment Variables** in the document “hlendusersmanual_en.pdf” (located in the **MANUAL** directory on the installation CD-ROM) describes the use of environment variables.

PetWin+ 3

Created by process engineers.. for process engineers

Features of PetWin+

PetWin+™ is a completely new version of the PetWin simulation tool for wastewater treatment for the petroleum and petrochemical industry. PetWin+ features the state-of-the-art model ASDMi, which now includes sulfur species and processes on top of all other treatment related components and processes.

PetWin+ uses the well-known BioWin™ simulator technology and even allows opening files developed in BioWin.

PetWin+ in Brief

The user can define and analyze behavior of complex treatment plant configurations with single or multiple petrochemical and other wastewater inputs. An example of a plant configuration is shown below.

Most types of petroleum and petrochemical wastewater treatment systems can be configured in PetWin+ using the many process modules. These include:

- A range of activated sludge bioreactor modules – suspended growth reactors (diffused air or surface aeration), various SBRs, media reactors for IFAS and MBBR systems, variable volume reactors.
- Anaerobic and aerobic digesters.
- Various settling tank modules – primary, ideal and 1-D model settlers.
- Different input elements – industrial influent (COD-based), other wastewater influent (COD- or BOD-based), user-defined (state variable concentrations), metal addition for chemical phosphorus precipitation (ferric or alum), methanol for denitrification.
- Other process modules – holding tanks, equalization tanks, dewatering units, flow splitters and combiners.

A crucial component of PetWin+ is the biological process model. The PetWin+ model is unique in that it merges both activated sludge and anaerobic biological processes. Additionally, the model integrates pH and chemical phosphorus precipitation processes.

It’s easy to use. The program has the look and feel of the many other Windows applications. When it is launched it comes up with the familiar interface and menu structure. Complex treatment plant schemes can be configured rapidly through "drag and drop" mouse actions. Functions are selected from the pull-down menus, using short cut keys, or by pointing the mouse and clicking on icons in the toolbar. The user can also access many of the Windows functions usually embedded in a Windows application; for example, selecting and configuring the printer setup. Context-sensitive Help is built into PetWin+ to provide on-line assistance, particularly for new users.

Careful consideration has gone into the design of the package; for example, the hardware and software platforms, the object oriented software development system, the data structures, the user interface, and so on. A primary aim has been the production of a package structured to allow on-going development in years to come.

The PetWin+ simulator suite presently includes two modules:

- A steady state module for analyzing systems based on constant influent loading and/or flow weighted averages of time-varying inputs. This unit is also very useful for mass balancing over complex plant configurations.
- An interactive dynamic simulator where the user can operate and manipulate the treatment system "on the fly". This module is ideal for training and for analyzing system response when subjected to time-varying inputs or changes in operating strategy.

Linking to PW Controller

PW Controller is a separate Windows application which links to a PetWin+ configuration and allows specification of a range of process control features commonly employed in wastewater treatment systems.

Start PW Controller To start, click on the Start PW Controller button at the right on the toolbar in PetWin+ to link the control application to the PetWin+ configuration.

PW Controller includes its own Help and Tutorials.